

PORTABLE FORCED AIR APPAREL AND EQUIPMENT DRYING,
DEODORIZING AND SCENTING SYSTEM

This application claims filing priority based upon
United States provisional patent application No.

5 60/417,242, filed October 9, 2002 on a Portable Forced Air
Apparel And Equipment Drying, Deodorizing And Scenting
System, filed by applicant, Glenn Lurie, currently pending.

BACKGROUND OF THE INVENTION

1. Field Of The Invention

10 The present invention deals with the field of
devices for generally drying of articles which are normally
hung such as on a drying rack or line after excessive use
or after washing thereof. The present device provides a
unique air flow configuration including a blower connected
15 through a plurality of conduits which can provide various
capabilities. As such, the present invention provides a
uniquely improved configuration for a drying rack which
includes the possibility for scenting thereof, deodorizing
thereof and wherein the drying rack includes a plurality of
20 holes in uniquely defined zones for dispensing air

therefrom to enhance drying of articles such as clothing or the like hung in these hanging conduit sections.

Furthermore the present invention provides a means for varying the configuration of the drying fixtures in an almost infinite number of ways since each drying fixture is itself separately attachable with respect to each manifold attachment device positioned at each manifold outlet of the air distributing manifold defined here within.

2. Description Of The Prior Art

Various devices have been patented for the purpose of causing air flow to facilitate drying of articles in various manners which are positioned upon various implements to enhance drying thereof such as shown in United States Patent No. 4,136,464 patented January 30, 1979 to A. Hay on a "Boot Drying Apparatus"; and United States Patent No. 4,697,724 patented October 6, 1987 to B. Pitcher on a "Resilient Glove Tree"; and United States Patent No. 5,058,289 patented October 22, 1991 to A. Guindon on a "Garment Drying Apparatus"; and United States Patent No. 5,117,565 patented June 2, 1992 to T. H. Willenbacher on a "Glove Drying Apparatus"; and United States Patent No. 5,125,169 patented June 30, 1992 to M. F. Bader and assigned to Protonaut, Inc. on a "Glove Drying Apparatus And Method"; and United States Patent No. 5,199,188 patented April 6, 1993 to D. Franz on a "Method

And Apparatus For Drying Footwear And Handwear"; and United States Patent No. 5,249,369 patented October 5, 1993 to M. Mallet on a "Method And Apparatus For Drying The Interior Surfaces of Hollow Articles Such As Air Rebreathing Or Resuscitator Bags"; and United States Patent No. 5,287,636 patented February 22, 1994 to A. Lafleur et al and assigned to Colette Laferriere and Lise Laferriere on a "Tubular Drying Apparatus For Footwear Or Handwear"; and United States Patent No. 5,379,525 patented January 10, 1995 to G. T. Taynor on a "Drying Stand For Ski Boots, Gloves And The Like"; and United States Patent No. 5,394,619 patented March 7, 1995 to B. E. Kaplan on a "Portable Clothes Dryer And Room Humidifier"; and United States Patent No. 5,406,717 patented April 18, 1995 to C. M. Dofka on a "Drying Rack For Utility Gloves"; and United States Patent No. 5,412,928 patented May 9, 1995 to F. Reithel on a "Dehydration Device"; and United States Patent No. 5,592,750 patented January 14, 1997 to G. Eichten on a "Portable Clothing And Equipment Drier"; and United States Patent No. 5,604,993 patented February 25, 1997 to I. G. Auckerman on "Glove Drying Devices And Methods"; and United States Patent No. 5,862,606 patented January 26, 1999 to H. Jannach on a "Device For Drying, Washing And/Or Disinfecting Protective Suits"; and United States Patent No. 5,862,924 patented January 26, 1999 to G. Dumont on a "Rack For Sports Equipment"; and United States Design

Patent No. Des.355,288 patented February 7, 1995 to F. Mallen and assigned to Dalenger Inc. on a "Rack For Hanging/Drying Sports Equipment"; and United States Design Patent No. Des.394,926 patented June 2, 1998 to S. Lindsay on a "Hockey Equipment Dryer"; and United States Patent No. 5,953,830 patented September 21, 1999 to H, Jannach and assigned to Helmut Jannach on an "Apparatus For Drying Clothing, Jackets Or The Like"; and United States Patent No. 6,005,227 patented December 21, 1999 to S. Pappas on a "Towel Warmer Console Cabinet"; and United States Patent No. 6,216,887 patented April 17, 2001 to M. Soo on a "Detachable Hanger For Sport Pads"; and United States Patent No. 6,327,792 patented December 11, 2001 to D. L. Hebert on a "Portable And Collapsible Sports Dryer".

SUMMARY OF THE INVENTION

In the improved portable apparatus for drying articles of the present invention a blower is preferably included which can optionally include a heating means therewithin to facilitate supplying of air which may be heated for drying of the articles. The blower is attached directly with respect to a main conduit. This main conduit defines a main duct extending therewithin which is capable of carrying air flow. The main conduit also defines a main conduit inlet to which the blower is attached for supplying

of air thereto. The main conduit inlet is in fluid flow communication with respect to the main duct to facilitate air flowing into the main duct through the main duct inlet. Furthermore a main duct outlet is defined within the main duct which is also in fluid flow communication with the main duct to allow air supplied into the main conduit to exit therefrom. The main conduit can further define a scenting chamber therewithin for selectively holding of a scenting material for applying an aroma to the drying air as it passes through the main duct if desired.

A distributing manifold is also included which may define a manifold duct extending throughout the interior thereof. This distributing manifold preferably defines a manifold inlet in fluid flow communication with respect to the manifold duct for facilitating air flow therebetween. The manifold inlet is preferably operatively attached with respect to the main conduit outlet to receive air exiting therefrom. The distributing manifold will define a plurality of manifold outlets at one or more locations therein. A plurality of manifold attachment devices will be included with one mounted within each of the manifold outlets to facilitate detachable securement thereto of one of the drying fixtures.

The present invention further defines a plurality of drying fixtures with each being detachably secured with respect to any single manifold outlet for receiving air

flow therefrom. Each of these drying fixtures provide a contour for holding of drying articles of various specific pre-defined shapes.

5 There are many common aspects among the drying fixtures such as the inclusion of a connecting conduit section. Each drying section will include such a connecting conduit section which will define a connecting section duct extending therethrough for carrying air. The connecting conduit section will not define any apertures
10 therein since it is designed to support the drying fixture and connect it to the distributing manifold while conveying air through the connecting section duct to the portion of the drying fixture which does include holes for drying. The connecting conduit section further defines a drying
15 fixture opening therewithin in fluid flow communication with respect to the connecting section duct.

A fixture attachment device is mounted on each of the connecting conduit sections adjacent to the drying fixture opening such that it is selectively securable with
20 respect to any one of the manifold attachment devices to detachably mount one of the drying fixtures with respect to the distributing manifold at one of a variety of choosable locations in order to allow fluid flow communication between the distributing manifold outlet and the drying
25 fixture opening to facilitate air flow into the connecting

section duct of the drying fixture for facilitating drying therewith.

5 A hanging conduit section will be included within each drying fixture which defines a hanging section duct extending therewithin. The hanging section duct is positioned in fluid flow communication with respect to the connecting section duct in order to receive air flow therefrom. The hanging conduit section itself will define a plurality of drying holes therewithin which are in fluid
10 flow communication with respect to the hanging section duct for the dispensing of air outwardly therefrom for drying of an article positioned thereadjacent. The hanging conduit section is adapted to receive an article detachably held thereadjacent in order to facilitate drying thereof as air
15 flow outwardly therefrom through the drying holes. The hanging conduit section of each of the drying fixtures is preferably of an adjustable size. This adjustable size is caused by the inclusion of a first hanging member and a second hanging member which are movably mounted with
20 respect to one another.

The first hanging member preferably will define a portion of the hanging section duct therewithin and will define a plurality of drying holes therewithin. The second hanging member will define preferably the remaining portion
25 of the hanging section duct therewithin and will also define a plurality of drying holes. The second hanging

member is preferably positioned in telescoping engagement with respect to the first hanging member such as to be movable in telescopic manner with respect thereto to vary the overall dimensions of the hanging conduit section of the drying fixture and in this manner greatly facilitate usage thereof by allowing articles of various sizes to be dried thereupon.

A fixture valve is preferably positioned within the connecting conduit section of each of the drying fixtures and extends thereacross to control the air flow through the connecting section duct. Each of these fixture valves is preferably movable to a completely opened position to allow full air flow through the connecting conduit section of the drying fixture and to a completely closed position to prevent air flow through the connecting conduit section of the drying fixture. Preferably the fixture valve can also be movable to any intermediate position therebetween to in some manner restrict the air flow through the connecting conduit section of the drying fixture.

In the preferred configuration of the present invention the main conduit will define an access opening therein which provides access to the scenting chamber to facilitate maintenance such as the replacement of the scenting means located therein after it has been significantly depleted. An access door may be also

included movable between a closed position extending across the access opening for sealing thereof and an opened position for providing access through the access opening into the scenting chamber for further facilitating maintenance.

As described above the present invention is particularly usable with articles, particularly articles of clothing having various sizes. The size of various pieces of athletic equipment or other clothing or protective gear that need to be dried can vary significantly in size and in some cases shape. To accommodate this variation in shape as described above the hanging conduit section can be formed of two or more telescopically engaging hanging members. Once the relative position of these parts is chosen for the specific article being dried, it is preferable that the adjustable positioning between these parts be restricted or further prevented. This can be achieved by the inclusion of one or more set screws engageable with respect to the first hanging member and the second hanging member for the purpose of selectively preventing relative movement therebetween.

In a further preferred embodiment of the present invention a deodorizing device may be attachable with respect to the drying fixture at various locations thereupon to facilitate deodorizing of articles while they are being dried thereupon.

In one chosen configuration of the present design the distributing manifold will include a first manifold member secured with respect to the main conduit such as to have a fixed configuration and be immovable. This fixed manifold member will define the manifold inlet. This manifold inlet will be positioned by the first manifold member in fluid flow communication with respect to the main conduit outlet in order to facilitate air flow therebetween. The fixed manifold member will define a first manifold outlet and a second manifold outlet therein. The fixed manifold member will also define a left fixed manifold exit aperture and a right fixed manifold exit aperture.

The distributing manifold preferably will also include two adjustable manifold sections secured thereto. In particular a left adjustable manifold member will preferably be detachably secured with respect to the left fixed manifold exit aperture for receiving air flow therefrom. This left adjustable manifold member will be of an adjustable configuration to vary the positions of the fixtures when attached with respect thereto.

In a similar manner a right adjustable manifold member will be detachably secured with respect to the right fixed manifold exit aperture for receiving air flow therefrom. This right adjustable manifold member will have an adjustable configuration as desired. The specific

configuration of the left adjustable manifold member and the right adjustable manifold member can be similar.

However, normally they will define between two and ten manifold attachment devices to which any one of the one through ten or even greater number of drying fixtures may be attached. By the capability of variable positioning of the drying fixtures relative to the left and right adjustable manifold members, the present invention will provide a uniquely reconfigurable design completely different from anything available or known in the prior art. Furthermore in the preferred configuration a first left valve means will be positioned within the first left adjustable conduit to control air flow therethrough and similarly a second left valve will be positioned within the second left adjustable conduit section to control air flow therethrough. In this manner individual sections of the apparatus can be closed completely or have restricted flow thereto in order to vary the overall drying capabilities of the design of the present invention.

The drying fixtures of the present invention can have various configurations. In particular a glove fixture can be included wherein the hanging conduit section thereof includes a hand loop section generally shaped in a circular manner as well as a thumb section which is shaped in a generally longitudinally extending manner. The hand loop section and thumb section are preferably positioned

adjacent to one another to facilitate placement of a glove thereon for enhancing drying.

Another configuration for the fixture can comprise a helmet or headgear fixture wherein the hanging conduit section thereof includes a rounded head section and wherein the connecting conduit section includes a chin support section which is defined in a plane immediately adjacent to the rounded head section for facilitating placement of head gear thereupon and enhancing drying thereof.

Another alternative configuration for the drying fixture is as a footwear fixture wherein the hanging conduit section thereof includes a plurality of L-shaped loop sections to facilitate placement of footwear thereupon for enhanced drying.

A long pants fixture may also be included wherein the hanging conduit section includes a first pants section and a second pants section positioned spatially apart and extending generally parallel with respect to one another. The first and second pants section preferably will each be of a tapered cylindrical shape to facilitate placement of long pants thereon for enhanced drying.

A protective cup shorts fixture may also be included wherein the hanging conduit section includes a first short pants section and second short pants section as well as a crotch cup drying zone for use with shorts

designed to hold a cup or other protective gear
therewithin.

5 An upper body fixture may also be included wherein
the hanging conduit section thereof includes a rounded
chest section and a first arm section extending outwardly
and downwardly therefrom. Also a second arm section can
extend outwardly and downwardly therefrom to enhance drying
of any upper body fixture such as a jersey shirt or jacket.

10 A leg protector fixture may also be included which
includes a first longitudinal section and a second
longitudinal section each shaped generally longitudinally
cylindrical and oriented generally parallel with respect to
one another to facilitate placement of leg protecting
members thereupon. This device is particularly usable with
15 leg protecting fixtures such as shin guards or goalie leg
pads.

20 An elbow pad fixture may also be included in the
apparatus of the present invention wherein the hanging
conduit section defines a first upper arm section and a
first lower arm section extending longitudinally and
oriented at an obtuse angle with respect to one another.
The hanging conduit section further includes a second upper
arm section and a second lower arm section extending
longitudinally and oriented in an obtuse angle with respect
25 to one another to facilitate drying of various
configurations of elbow pads.

A chest protection fixture can be included wherein the hanging conduit section thereof includes a rectangular chest section and a left arm section extending outwardly and downwardly and a right arm section extending similarly. Such a chest protection fixture is usable for drying of shoulder pads or other chest or upper body protection apparatus.

It is an object of the present invention to provide a portable apparatus for drying articles which is infinitely configurable.

It is an object of the present invention to provide a portable apparatus for drying articles which includes a plurality of manifold attachment means each of which can be connected to any one of a plurality of drying fixtures to facilitate variation in the configuration thereof.

It is an object of the present invention to provide a portable apparatus for drying articles which can include a means for deodorizing while drying.

It is an object of the present invention to provide a portable apparatus for drying articles which can include a means for scenting while drying.

It is an object of the present invention to provide a portable apparatus for drying articles which includes adjustable sections for providing variation and adjustability in the relative positioning of a plurality of

drying fixtures with respect to one another.

It is an object of the present invention to provide a portable apparatus for drying articles which provides a plurality of drying fixtures each having a unique configuration adaptable for drying of a particular article of clothing.

It is an object of the present invention to provide a portable apparatus for drying articles which provides a hanging conduit section for hanging of articles for drying within a specific drying fixture wherein the length and/or size of the hanging conduit is variable by defining it with two or more telescopically engageable sections.

It is an object of the present invention to provide a portable apparatus for drying articles which can include capping means for limiting air flow in selected areas within the apparatus.

BRIEF DESCRIPTION OF THE DRAWINGS

While the invention is particularly pointed out and distinctly claimed in the concluding portions herein, a preferred embodiment is set forth in the following detailed description which may be best understood when read in connection with the accompanying drawings, in which:

Figure 1 is a perspective illustration of an embodiment of the blower, main conduit and distributing manifold of the present invention;

5 Figure 2 is a perspective illustration of an embodiment of a glove drying fixture;

 Figure 3 is a perspective illustration of a headgear drying fixture;

 Figure 4 is a perspective illustration of a footwear drying fixture;

10 Figure 5 is a perspective illustration of a long pants drying fixture;

 Figure 6 is a perspective illustration of a protective cup shorts drying fixture;

15 Figure 7 is a perspective illustration of an upper body drying fixture;

 Figure 8 is a perspective illustration of a leg protector drying fixture;

 Figure 9 is a perspective illustration of an elbow pad drying fixture; and

20 Figure 10 is a perspective illustration of a chest and shoulder protection drying fixture.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

5 The present invention as depicted in the
embodiment shown in Figure 1 shows a portable apparatus for
drying of articles 10. The articles to be dried can be any
type of article but preferably would be clothing and in the
currently perceived most common use for this apparatus, the
articles will be sporting equipment. Such sporting
equipment should be washed in between sporting events and
often times these events are in locations where a
10 conventional washer and dryer is not available. Other
times the washing of such garments is not possible and
therefore it is necessary to dry them to remove
perspiration therefrom in between uses within very short
time periods. As such, the portable apparatus of the
15 present invention is particularly usable for drying of
articles of clothing for sporting activities such as ice or
in-line hockey, soccer, basketball, football, lacrosse,
baseball or other outdoor activities such as hunting,
fishing or skiing.

20 It is also important that the apparatus of the
present invention be lightweight and portable. The
apparatus as disclosed in the present invention can be hung
from any type of door and preferably would be hung over the
uppermost edge of such door. Alternatively, the present
25 invention can be mounted upon a door or wall or any other

vertically extending surface. In a third embodiment an integrated mounting board can be utilized as a table and include downwardly extending legs for separate independent positioning as desired. With all of these uses the present invention still will maintain the basic configuration of the embodiment as shown in Figure 1.

Figure 1 shows that the apparatus of the present invention includes a blower 12 which can include a heating element therewithin optionally. Blower 12 is designed to provide air for drying to a main conduit 14. Main conduit 14 preferably defines a main duct 16 extending along the centerline 16. Main conduit 14 preferably defines a main conduit inlet 18 and a main conduit outlet 20 both in fluid flow communication with respect to the main duct 16. Main duct inlet 18 is adapted to receive air from the blower 12 for distribution of heated air.

A distributing manifold 22 is preferably included and is operatively connected with respect to the main conduit 14 to receive air therefrom. The distributing manifold 22 preferably defines a manifold duct 24 therewithin which is in fluid flow communication with a manifold inlet 26 and a manifold outlet 28 both also defined in the manifold 22. The manifold inlet 26 is fixedly secured with respect to the main conduit outlet 20 in such a manner as to receive air flow therefrom for drying.

The distributing manifold 22 will preferably define a plurality of manifold attachment devices 30. One of such manifold attachment devices 30 will be secured with respect to each manifold outlet 28 defined in the distributing manifold 22. Distributing manifold 22 can include as few as two such manifold outlets 28 or as many as ten or more such outlets. Each of these outlets however should include a manifold attachment device 30 positioned thereadjacent to facilitate securement of a drying fixture 32 thereto selectively.

The drying fixture 32 is detachably securable to the manifold attachment means 30 adjacent a manifold outlet 28 to receive air therefrom for drying. Drying fixture 32 can be formed of many different shapes, sizes or constructions to facilitate the drying of articles of different shape, size and configuration. It is an important aspect of the present invention that each drying fixture 32 can be secured with respect to the distributing manifold 22 by being secured to any one of the individual manifold outlets 28. In this manner a single particular chosen drying fixture 32 can be positioned in various orientations depending on the extent of drying required and other parameters.

Each drying fixture 32 will comprise basically two sections. Initially drying fixture 32 will include a connecting conduit section 34 and a hanging conduit section

42. The connecting conduit section 34 defines extending there throughout a connecting section duct 36. Also connecting conduit section 34 includes a drying fixture opening 38. The drying fixture opening 38 includes a fixture attachment means 40 mounted thereadjacent. Fixture attachment means 40 of each drying fixture 32 is attachable with respect to one of the manifold attachment devices 30 positioned at the manifold outlets 28 of distributing manifold 22. As such, since the fixture attachment device 40 is attachable with respect to any one of the manifold attachment devices 30, then the drying fixture 32 can be secured with respect to the distributing manifold 22 at any of the as many as ten or more manifold attachment means. This universal versatility allows the individual drying fixtures 32 to be positioned at many different locations. Also the present invention does provide a plurality of different configuration for the drying fixtures 32 and, as such, these are attachable in many different types of arrangements depending on the type of articles being washed, the type of articles to be dried and the environment in which they are being dried.

The drying fixture 32 also includes a hanging section 42. Hanging section 42 defines a plurality of drying holes 46 thereadjacent. Hanging section 42 is adapted to receive the article 10 to be dried positioned hanging thereover. Hanging section 42 is connected to the

distributing manifold 22 by the connecting conduit section 34 of the drying fixture. Thus the drying fixture includes the non-perforated connecting conduit section 34 with the fixture attachment means 40 mounted therein and it also includes the hanging section 42 upon which the drying actually occurs. Hanging section 42 preferably includes a hanging section duct 44 extending therethrough for communicating air for drying to the drying holes 46 positioned thereover. The hanging section 42 is adapted to dispense the drying air outwardly in many different directions subject to the positioning of the drying holes 46. In this manner the hanging conduit section 42 will achieve drying of an article 10 positioned thereover. The purpose of the connecting section 34 is to space the hanging conduit section 42 outwardly from the distributing manifold 22 to allow an article 10 to be positioned spatially distant therefrom and hang downwardly from the hanging section 42. In the preferred embodiment the connecting section 34 will preferably include a fixture valve 48 positioned thereon. This fixture valve 48 is adapted to open to allow full air flow for drying to the associated fixture or to close and prevent air flow to a drying fixture in a situation where the particular drying fixture 32 is not being utilized or where the article 10 positioned hanging over the hanging section 42 thereof has already been dried.

The present invention may also include a scenting chamber 50 which preferably is defined within the main conduit 14. Scenting chamber 50 includes an access door 54 extending thereover and an access opening 52 immediately thereadjacent. Access door 54 is adapted to be movable between a closed position extending across the access opening 52 and limiting access into the scenting chamber 50 and an opened position wherein the access door 54 allows full access to the access opening 52 into the scenting chamber 50 for replacement of the scenting material located therewithin as needed.

One of the important improvements of the present invention is in the configuration of the hanging conduit section 42 of each drying fixture 32 to preferably include a telescoping interconnection 57 positioned between a first hanging member 56 and a second hanging member 58. First hanging member 56 is connected to the connecting section 34 as to be firmly secured with respect thereto. The second hanging member 58 is telescopically engageable and movable with respect to the first hanging member 56 through the telescoping interconnection 57 therebetween. In this manner movement of the second hanging member 58 away from the first hanging member 56 will expand the overall size of the hanging conduit section 42. This will be necessary when used with articles 10 to be dried which are of a larger size but similar configuration. On the other hand

for articles 10 which are somewhat smaller the second hanging member 58 can be moved toward the first hanging member 56 through the telescoping interconnection 57 therebetween thereby decreasing the overall size of the hanging conduit section 42 and facilitating drying of smaller items as well as allowing further compacting of the apparatus of the present invention for enhancing portability thereof. A set screw 60 may be engageable with respect to the first hanging member 56 and the second hanging member 58 to lock it in position and prevent further movability of the telescoping interconnection 57 when the set screw 60 is in the locked position. Set screw 60 is movable to the unlocked or disengaged position to allow relative telescoping movement of the second hanging member 58 with respect to the first hanging member 56.

Figures 7 and 9 show the inclusion of a deodorizing means 62. Such deodorizing means 62 can be utilized specifically in those situations where washing is not possible and only drying of sweat filled articles 10 is possible. In those situations it is best to maximize the amount of deodorizing of the articles 10 during drying thereof. As such, a deodorizing means 62 can be attached at various locations to the hanging conduit section 42 of any one of the drying fixtures 32 and in this manner reduce unwanted odors in the article 10 during drying thereof. Such deodorizing material can include any material commonly

used for odor elimination such as non-toxic environmentally safe volcanic materials, charcoal odor absorbing filters or any other similar deodorizing material.

5 In Figure 2 a particular embodiment of the drying fixture 32 is disclosed for the purpose of drying gloves. This glove fixture 140 is designed for the purpose of eliminating odors on hand coverings such as gloves or mittens 142. The glove or mitten 142 is shown in dotted outline surrounding the hanging section 42 of glove fixture 10 140. Glove fixture 140 includes a hand loop section 144 which is generally circular in shape and a thumb section 146 which is generally longitudinally in configuration. Preferably hand loop section 144 and thumb section 146 are positioned adjacent to one another to facilitate placement 15 of a glove or other hand covering thereupon for enhancing drying thereof.

Figure 3 shows an embodiment of a helmet or headgear drying fixture 148 of the present invention which is designed specifically for the purpose of drying a helmet 20 150 or other headgear in dotted outline surrounding helmet fixture 148. The helmet fixture 148 preferably includes a rounded head section 152 as well as a chin support section 154 defines in a plane immediately adjacent the rounded head section 152 to facilitate drying of headgear 25 positioned thereupon. In the preferred embodiment of this design the rounded head section 152 will be defined in the

hanging conduit section 42 whereas the chin support section 154 will be defined in the connecting conduit section 34. Thus chin support section 154 will not include any drying holes 46 therein but the rounded head section 152 will indeed include drying holes 46.

A footwear fixture 156 is shown in Figure 4. Footwear fixture 156 is adapted to dry various types of footwear most commonly being shoes, boots, cleats or skates 158. These footwear devices are shown in Figure 4 in dotted outline as reference 158. The footwear fixture 156 preferably defines one or more L-shaped loop sections 160 which are designed to receive the general overall L-shape of one or more footwear items wherein the lower portion is the sole portion of the footwear and the part extending at approximately ninety degrees with respect thereto comprises the ankle portion thereof.

A long pants fixture 162 is shown in Figure 5. Long pants 163 are shown in dotted outline extending over the first pants section 164 and the second pants section 165 comprising the long pants fixture 162. These first and second pants sections are preferably positioned spatially apart and extending generally parallel to each other and are of a tapered cylindrical shape to facilitate placement of individual pant legs thereover for facilitating drying thereof.

Figure 6 shows a cup shorts fixture 166. In many sports there are garments worn for holding supporters or cups between the legs of a user in the crotch area and these areas need to be dried significantly since they are the source of a significant amount of perspiration. As such, a specific cup shorts fixture 166 is included with a first leg section 167 and a second leg section 168 and a crotch cup section 170 extending therebetween. These are designed to hold cup shorts 169 over the first and second leg sections 167 and 168 and the crotch cup section 170 as shown in dotted outline on Figure 6. Each of the pants sections generally include a tapered cylindrical shape somewhat shorter than the first and second pants sections 164 and 165 of the long pants fixture 162.

An upper body fixture 172 is shown in Figure 7. This upper body fixture is designed to facilitate drying of a jersey or shirt or jacket or other upper body garment 173 shown in dotted outline extending over the upper body fixture 172 of Figure 7. The upper body fixture 172 includes a rounded chest section 174 as well as a first arm section 176 extending outwardly and downwardly therefrom and a second arm section 178 extending outwardly and downwardly at a location opposite from the first arm section 176. In this manner a convenient means is provided for drying upper body coverings such as jersey, shirts, jackets, vests or other similar items.

Figure 8 shows a leg protector fixture 180. It includes a hanging conduit section which has a first longitudinal section 184 and a second longitudinal section 186 each shaped generally longitudinally cylindrically and oriented parallel with respect to one another to facilitate placement of a leg protection member thereupon for drying. Such leg protection members generally include shin guards or protective leg pads 182. These devices are shown in dotted outline extending over the first longitudinal section 184 defined in Figure 8.

Figure 9 shows an elbow pad fixture 188 wherein the hanging conduit section thereof includes a first upper arm section 192 and a first lower arm section 194 extending longitudinally and oriented at an obtuse angle with respect to one another. Similarly this elbow pad fixture 188 includes a second upper arm section 196 and a second lower arm section 198 extending longitudinally and oriented at an obtuse angle with respect to the second upper arm section 196 in order to facilitate positioning of elbow pads 190 thereupon to facilitate drying. Elbow pads are normally positioned at an obtuse angle with respect to one another and this is the reason for the angular relationship between the first upper arm section 192 and the first lower arm section 194 as well as the angular relationship between the second upper arm section 196 and the second lower arm section 198.

Figure 10 shows a chest protection fixture 200 designed specifically for the purpose of drying a chest protector or shoulder pad 202. These pads or protectors 202 are shown in dotted outline extending over the chest protection fixture 200 in Figure 10. The chest protection fixture 200 includes a rectangular chest section 204 as well as a left arm section 206 extending outwardly and downwardly therefrom and a right arm section 208 also extending outwardly and downwardly therefrom oppositely positioned from left arm section 206. As such the chest protection fixture 200 of Figure 10 provides a unique overall configuration for the drying of chest protectors and shoulder pads 202.

One of the major novel aspects of the present invention is in the configuration of the distributing manifold 22 of the present invention as shown best in Figure 1. The distributing manifold 22 preferably includes a fixed manifold member 64 which defines a first manifold outlet 66 and a second manifold outlet 68 as well as a left fixed manifold exit aperture 70 and a right fixed manifold exit aperture 72. In the preferred configuration first and second manifold outlets 66 and 68 can be fixedly secured and immovable with respect to the overall configuration of the fixed manifold member 64. These manifold outlets 66 and 68 can pivot slightly if desired to provide variation in positioning thereof. They are shown in Figure 1 extending

forwardly from the fixed manifold member 64.

5 Additionally the distributing manifold 22 will include a left adjustable manifold member 74 and a right adjustable manifold member 76. Each of these manifolds is significantly adjustable through a continuum of different possible positions and orientations relative to the main conduit 14 for the purpose of varying the drying positions of the drying fixtures during operation of the blower 12. Thus it is preferably that the fixed manifold member 64
10 include fixedly positioned outlets such as 66 and 68 but also variably positionable outlets such as those defined in the left adjustable manifold member 74 and the right adjustable manifold member 76.

15 In particular the left adjustable manifold member 74 preferably will define a left linking adjustable conduit section 78. This section 78 is movably positionable preferably rotatably with respect to the left fixed manifold exit aperture 70.

20 A first left adjustable conduit section 82 is adjustably positionable with respect to the left linking adjustable conduit section 78 and a second left adjustable conduit section 84 is adjustable positionable with respect to the left linking adjustable conduit section 78. In this manner positioning of the conduit sections 82 and 84 vary
25 relative to the left linking adjustable conduit section 78 and the fixed manifold member 64 provides an overall

variability in positioning of the drying fixtures. A first left splitting conduit 86 is preferably positioned extending outwardly from the first left adjustable conduit section 82. The first left splitting conduit 86 will define a third manifold outlet 88 and a fourth manifold outlet 90 therewithin. Similarly the second left splitting conduit 92 will be in fluid flow communication with the second left adjustable conduit section 84 and extend outwardly therefrom to define therein the fifth manifold outlet 94 and the sixth manifold outlet 96. In this manner the left linking adjustable conduit 78 will include four separate manifold outlets 88, 90, 94 and 96 which are movable with respect to one another.

Also it is preferable that the first left adjustable conduit section 82 include a first left valve 112 therewithin which is capable of being moved to the closed position to prevent the flow of drying air therethrough to the third manifold outlet 88 and the fourth manifold outlet 90 if desired. This would be needed when the articles 10 to be dried positioned thereupon become fully dried and no longer need air supplied thereto or when those outlets are not being utilized for drying.

Similarly a second left valve 114 is preferably positioned within the second left adjustable conduit section 84 such as to selectively cause a cessation of air flow therethrough and prevent the movement of air to the

second left splitting conduit 92 and the fifth manifold outlet 94 and sixth manifold outlet 96 defined therewithin.

In a similar manner the right adjustable manifold member 76 preferably can include a right linking adjustable conduit section 118 extending directly outwardly from the right fixed manifold exit aperture 72 of fixed manifold member 64. A first right adjustable conduit section 120 and a second right adjustable conduit section 122 will preferably each be connected to the right linking adjustable conduit section 118 at positions separate from one another and be in fluid flow communication therewith. Thus the first right adjustable conduit section 120 will extend outwardly from the right linking adjustable conduit section 118 at a first location and the second right adjustable conduit section 122 will extend outwardly therefrom at another non-adjacent position.

A first right splitting conduit 124 will extend outwardly from the first right adjustable conduit section 120 and will define a seventh manifold outlet 126 and an eighth manifold outlet 128 therewithin. In a similar manner a second right splitting conduit 130 will extend outwardly from the second right adjustable conduit section 122 to define a ninth manifold outlet 132 therein and a tenth manifold outlet 134 therewithin. In this manner the first right splitting conduit 124 will be separately movable and positionable from the second right splitting

conduit 130 to vary the relative positioning of the sixth and seventh manifold outlets 126 and 128 from the ninth and tenth manifold outlets 132 and 134.

5 A first right valve 136 is preferably positioned within the first right adjustable conduit section 120 for controlling and possibly eliminating air flow to the seventh manifold outlet 126 and the eighth manifold outlet 128. In a similar manner a second right valve 138 can be positioned in the second right adjustable conduit section 10 122 for restricting or completely eliminating the flow of drying air to the ninth manifold outlet 132 and the tenth manifold outlet 134 defined by the second right splitting conduit 130. As such these valves can provide full flow or no flow or restricted flow as desired by manipulation of 15 the valving means contained therewithin.

Thus, in the particular embodiment shown in Figure 1, the first and second manifold outlets 66 and 68 can be fixedly mounted within the fixed manifold 64. On the other hand the other outlets will all be movably positioned. In 20 particular, third manifold outlet 88 and fourth manifold outlet 90 are defined by the first left splitting conduit 86 and are movable therewith. In a similar manner the fifth manifold outlet 94 and the sixth manifold outlet 96 are defined in the second left splitting conduit 92 and are 25 adjustably positionable therewith. In a similar manner the seventh manifold outlet 126 and the eighth manifold outlet

128 are movably positioned along with the first right
splitting conduit 124. Similarly the ninth manifold outlet
132 and the tenth manifold outlet 134 are movably
positioned along with the second right splitting conduit
130. Each of these ten manifold outlets include mounted
thereadjacent a respective manifold attachment device. As
such, ten manifold attachment means are included. These
are shown by reference numerals 101 through 110. First
manifold attachment device 101 and second manifold
attachment device 102 are secured with respect to the first
manifold outlet 66 and the second manifold outlet 68
respectively. Similarly third manifold attachment device
103 and fourth manifold attachment device 104 are secured
to the third and fourth manifold outlets 88 and 90. The
fifth manifold attachment device 105 and the sixth manifold
attachment device 106 are secured to the fifth and sixth
manifold outlets 94 and 96.

Furthermore the seventh and eighth manifold
attachment devices 107 and 108 are secured respectively to
the seventh and eighth manifold outlets 126 and 128 and
finally the ninth and tenth manifold attachment means 109
and 110 are secured to the ninth and tenth manifold outlets
132 and 134 respectively.

In this manner each manifold outlet includes a
manifold attachment means mounted thereadjacent or
therewithin that will facilitate securement thereof with

respect to any one of the two to ten or more drying
fixtures 32 of the present invention because they are
securable with respect to the fixture attachment means 40
thereof. Thus each drying fixture 32 will include a
5 fixture attachment means 40 attachable to any one of the
ten or more individual manifold attachment devices 101 to
110 as shown in this embodiment. It should be appreciated
that distributing manifold 22 can define any number of
manifold outlets and manifold attachment means and that the
10 present invention can be provided with any number of
different drying fixtures 32 having variable configurations
for drying different types, shapes and sizes of articles
10.

It should also be appreciated that the left
15 adjustable manifold member 74 can be removed from
securement with respect to the left fixed manifold aperture
70 and this aperture closed by the securement of a left
capping means 98 extending thereover. In a similar manner
a right capping means 99 can be positioned extending over
20 the right fixed manifold exit aperture 72 after removal of
the right adjustable manifold 76 therefrom in order to
restrict from therethrough. Thus each of the adjustable
manifold members 74 and 76 can selectively be utilized or
removed and the opening to which they have been connected
25 can be closed by securement with respect to one or more
capping means 98 and/or 99. This provides further

versatility to the apparatus of the present invention.

While particular embodiments of this invention have been shown in the drawings and described above, it will be apparent, that many changes may be made in the form, arrangement and positioning of the various elements of the combination. In consideration thereof it should be understood that preferred embodiments of this invention disclosed herein are intended to be illustrative only and not intended to limit the scope of the invention.